

**STIC Biotechnology Systems Branch**

**RAW SEQUENCE LISTING**  
**ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/531,870  
Source: PG/10  
Date Processed by STIC: 9/12/05

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

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FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebs/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05): U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/24/05

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PCT

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/531,870

DATE: 09/12/2005  
TIME: 13:21:40

Input Set : A:\764765\_1.txt  
Output Set: N:\CRF4\09122005\J531870.raw

3 <110> APPLICANT: FIT Biotech Oyj Plc.  
5 <120> TITLE OF INVENTION: Novel selection system  
7 <130> FILE REFERENCE: 2031002  
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/531,870  
C--> 9 <141> CURRENT FILING DATE: 2005-04-19

Does Not Comply  
Corrected Diskette Needed

*pr 4-6*

9 <160> NUMBER OF SEQ ID NOS: 29  
11 <170> SOFTWARE: PatentIn version 3.1  
13 <210> SEQ ID NO: 1  
14 <211> LENGTH: 780  
15 <212> TYPE: DNA  
16 <213> ORGANISM: Escherichia coli  
18 <400> SEQUENCE: 1  
19 gtttcgtttg attggtgtg gttttatata gtcattactg cccgtaatat gccttcgcg 60  
21 catgettacg cagatagtgt ttatccagca gcgtttgctg catatccggt aactgcggcg 120  
23 ctaactgacg gcagaatata cccatataag cgacctcttc cagcacgatg gcgttatgca 180  
25 ccgcattcttc ggcatttttg ccccatgcaa acgggccgtg ggaatggacc agaacgccgg 240  
27 gcatttgcg tgcacgata ccctgttttt caaagggttc tacgatgacg ttaccggttt 300  
29 cccactcata ttgcgcgttg atttctgctg cggtcatttt gcgggtgcag ggaatggtgc 360  
31 cgtagaaata gtcggcggtg gtggtgccgg ttgctggaat cgactgacct gcctgcgccc 420  
33 agatggtggc gtggcgcgag tgcgtatgca caatgccgcc aatggagggg aatgcctgat 480  
35 agagcagccg gtgagttggc gtgtcggagg agggcttttt cgtaccttca accacttcac 540  
37 cggtttcgat gctaaccacg accatatcgt cagcggtcac gacgtgtaa tcgacgccgg 600  
39 aaggtttgat cacaagacg ccgcgctcgc gatcaacggc gctgacgttg ccccatgtga 660  
41 gcgtgaccag gttgtgtttt ggcagcgcca ggttggcttc taatacctgg cgtttgagat 720  
43 cttctaacad gttgactcct tcgtgccgga tgcgctttgc ttatccggcc tacaaaatcg 780  
46 <210> SEQ ID NO: 2  
47 <211> LENGTH: 76  
48 <212> TYPE: DNA  
49 <213> ORGANISM: Artificial Sequence  
51 <220> FEATURE:  
52 <223> OTHER INFORMATION: Primer  
54 <400> SEQUENCE: 2  
55 cgccatggtt ctcatgtttg acagcttata atcgataagc tttaatgcgg tagtttagca 60  
57 cgaaggagtc aacatg 76  
60 <210> SEQ ID NO: 3  
61 <211> LENGTH: 64  
62 <212> TYPE: DNA  
63 <213> ORGANISM: Artificial Sequence  
65 <220> FEATURE:  
66 <223> OTHER INFORMATION: Primer  
68 <400> SEQUENCE: 3  
69 cgccatggac tagtaaaaaa aagcccgcgc attaggcggg ctgtcattac tgcccgtaat 60  
71 atgc 64

RAW SEQUENCE LISTING  
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DATE: 09/12/2005  
 TIME: 13:21:40

Input Set : A:\764765\_1.txt  
 Output Set: N:\CRF4\09122005\J531870.raw

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74 <210> SEQ ID NO: 4
75 <211> LENGTH: 81
76 <212> TYPE: DNA
77 <213> ORGANISM: Artificial Sequence
79 <220> FEATURE:
80 <223> OTHER INFORMATION: Primer
82 <400> SEQUENCE: 4
83 cgccatggac tagttctcat gtttgacagc ttatcatcga taagctttaa tgcggtagtt      60
85 tagcacgaag gagtcaacat g
88 <210> SEQ ID NO: 5
89 <211> LENGTH: 58
90 <212> TYPE: DNA
91 <213> ORGANISM: Artificial Sequence
93 <220> FEATURE:
94 <223> OTHER INFORMATION: Primer
96 <400> SEQUENCE: 5
97 cgccatggaa aaaaaagccc gctcattagg cgggctgtca ttactgcccc taatatgc      58
100 <210> SEQ ID NO: 6
101 <211> LENGTH: 22
102 <212> TYPE: DNA
103 <213> ORGANISM: Artificial Sequence
105 <220> FEATURE:
106 <223> OTHER INFORMATION: Primer
108 <400> SEQUENCE: 6
109 gccagggttt tccagtcac ga
112 <210> SEQ ID NO: 7
113 <211> LENGTH: 24
114 <212> TYPE: DNA
115 <213> ORGANISM: Artificial Sequence
117 <220> FEATURE:
118 <223> OTHER INFORMATION: Primer
120 <400> SEQUENCE: 7
121 gagcggataa caatttcaca cagg
124 <210> SEQ ID NO: 8
125 <211> LENGTH: 22
126 <212> TYPE: DNA
127 <213> ORGANISM: Artificial Sequence
129 <220> FEATURE:
130 <223> OTHER INFORMATION: Primer
132 <400> SEQUENCE: 8
133 ccaactcacc ggctgctcta tc
136 <210> SEQ ID NO: 9
137 <211> LENGTH: 24
138 <212> TYPE: DNA
139 <213> ORGANISM: Artificial Sequence
141 <220> FEATURE:
142 <223> OTHER INFORMATION: Primer
144 <400> SEQUENCE: 9
145 aatgccgaag atgcggtgca taac

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RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/531,870

DATE: 09/12/2005  
TIME: 13:21:40

Input Set : A:\764765\_1.txt  
Output Set: N:\CRF4\09122005\J531870.raw

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148 <210> SEQ ID NO: 10
149 <211> LENGTH: 20
150 <212> TYPE: DNA
151 <213> ORGANISM: Artificial Sequence
153 <220> FEATURE:
154 <223> OTHER INFORMATION: Primer
156 <400> SEQUENCE: 10
157 taactgcggc gctaactgac 20
160 <210> SEQ ID NO: 11
161 <211> LENGTH: 20
162 <212> TYPE: DNA
163 <213> ORGANISM: Artificial Sequence
165 <220> FEATURE:
166 <223> OTHER INFORMATION: Primer
168 <400> SEQUENCE: 11
169 ggttgctgga atcgactgac 20
172 <210> SEQ ID NO: 12
173 <211> LENGTH: 66
174 <212> TYPE: DNA
175 <213> ORGANISM: Artificial Sequence
177 <220> FEATURE:
178 <223> OTHER INFORMATION: Primer
180 <400> SEQUENCE: 12
181 ctcaaacgcc caggtattag aagccaacct ggcgctgcc aaacacgtgt aggctggagc 60
183 tgcttc 66
186 <210> SEQ ID NO: 13
187 <211> LENGTH: 60
188 <212> TYPE: DNA
189 <213> ORGANISM: Artificial Sequence
191 <220> FEATURE:
192 <223> OTHER INFORMATION: Primer
194 <400> SEQUENCE: 13
195 ggtttgatca caaagacgcc gcgctcgca tcaacggcgc attccgggga tccgtcgacc 60
198 <210> SEQ ID NO: 14
199 <211> LENGTH: 20
200 <212> TYPE: DNA
201 <213> ORGANISM: Artificial Sequence
203 <220> FEATURE:
204 <223> OTHER INFORMATION: Primer
206 <400> SEQUENCE: 14
207 cggcacgaag gagtcaacat 20
210 <210> SEQ ID NO: 15
211 <211> LENGTH: 20
212 <212> TYPE: DNA
213 <213> ORGANISM: Artificial Sequence
215 <220> FEATURE:
216 <223> OTHER INFORMATION: Primer
218 <400> SEQUENCE: 15
219 tgatagagca gccggtgagt 20

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RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/531,870

DATE: 09/12/2005  
TIME: 13:21:40

Input Set : A:\764765\_1.txt  
Output Set: N:\CRF4\09122005\J531870.raw

222 <210> SEQ ID NO: 16  
223 <211> LENGTH: 20  
224 <212> TYPE: DNA  
225 <213> ORGANISM: Artificial Sequence  
227 <220> FEATURE:  
228 <223> OTHER INFORMATION: Primer  
230 <400> SEQUENCE: 16  
231 tcagatcctt ggcggcaaga 20  
234 <210> SEQ ID NO: 17  
235 <211> LENGTH: 20  
236 <212> TYPE: DNA  
237 <213> ORGANISM: Artificial Sequence  
239 <220> FEATURE:  
240 <223> OTHER INFORMATION: Primer  
242 <400> SEQUENCE: 17  
243 tgtaatcgac gccggaaggt 20  
246 <210> SEQ ID NO: 18  
247 <211> LENGTH: 1030  
248 <212> TYPE: DNA  
249 <213> ORGANISM: Artificial  
W--> 251 <220> FEATURE: needs explanation (see p6 for error explanation)  
W--> 251 <223> OTHER INFORMATION:   
W--> 251 <400> 18  
252 ggatccgacc ggcaacggta cagatccgac cggcaacggg acagatccga ccggcaacgg 60  
254 tcagatccga ccggcaacgg tacagatccg accggcaacg gtacagatcc gaccggcaac 120  
256 ggtacagatc cgaccggcaa cggtagatag ccgaccggca acggtacaga tccgaccggc 180  
258 aacggtacag atccgaccgg caacggtaca gatcccccta gcgaattgac tagttctcat 240  
260 gtttgacagc ttatcatcga taagctttaa tgcggtagtt tagcacgaag gagtcaacat 300  
262 gttagaagat ctcaaacgcc aggtattaga agccaacctg gcgctgccaa aacacaacct 360  
264 ggtcacgctc acatggggca acgtcagcgc cgttgatcgc gagcgcggcg tctttgtgat 420  
266 caaaccttcc ggcgtcgatt acagcgtcat gaccgctgac gatatggctg tggttagcat 480  
268 cgaaaccggg gaagtgggtg aaggtacgaa aaagccctcc tccgacacgc caactcaccg 540  
270 gctgctctat caggcattcc cctccattgg cggcattgtg catacgcaact cgcgccacgc 600  
272 caccatctgg gcgcaggcgg gtcagtcgat tccagcaacc ggcaccaccc acgccgacta 660  
274 tttctacggc accattccct gcacccgcaa aatgaccgac gcagaaatca acggcgaata 720  
276 tgagtgggaa accggtaacg tcatcgtaga aacctttgaa aaacagggtg tccgatgcagc 780  
278 gcaaatgccc ggcgttctgg tccattccca cgcccgttt gcattggggc aaaatgccga 840  
280 agatgcggtg cataagcggc tcgtgctgga agaggtcgct tataatggga tattctgccc 900  
282 tcagtttagc ccgcagttac cggatatgca gcaaacgctg ctggataaac actatctgcg 960  
284 taagcaatgc scgaaggcat attacgggca gtaatgacag ccgcctaat gagcgggctt 1020  
286 ttttttccat 1030  
289 <210> SEQ ID NO: 19  
290 <211> LENGTH: 696  
291 <212> TYPE: DNA  
292 <213> ORGANISM: Escherichia coli  
294 <400> SEQUENCE: 19  
295 atggttagaag atctcaaacg ccaggtatta gaagccaacc tggcgctgcc aaaacacaac 60  
297 ctggtcacgc tcacatgggg caacgtcagc gccgttgatc gcgagcgcgg cgtctttgtg 120  
299 atcaaacctt ccggcgctga ttacagcgtc atgaccgctg acgatatggt cgtggttagc 180

RAW SEQUENCE LISTING  
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301 atcgaaaccg gtgaagtggg tgaaggtacg aaaaagccct cctccgacac gccaaactcac 240
303 cggctgctct atcaggcatt cccctccatt ggccgcatg tgcatacgca ctccgcccac 300
305 gccaccatct gggcgaggc gggtcagtcg attccagcaa ccggcaccac ccacggcgac 360
307 tatttctacg gcaccattcc ctgcaccgcg aaaatgaccg acgcagaaat caacggcgaa 420
309 tatgagtggg aaaccggtaa cgtcatcgta gaaacctttg aaaaacaggg tatcgatgca 480
311 gcgcaaatgc ccggcgcttc ggtccattcc caccggcccg ttgcatgggg caaaaatgcc 540
313 gaagatgcgg tgcataacgc catcgtgctg gaagaggctg cttatatggg gatattctgc 600
315 cgtcagttag cggcgagtt accggatag cagcaaacgc tgctggataa acactatctg 660
317 cgtaagcatg gcgcgaaggc atattacggg cagtaa 696

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320 <210> SEQ ID NO: 20

321 <211> LENGTH: 687

322 <212> TYPE: DNA

323 <213> ORGANISM: Escherichia coli

325 <400> SEQUENCE: 20

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326 atgcaaaagc taaaacagca ggtatttgaa gccaacatgg agctgccgcg ctacgggctg 60
328 gtgaccttta cctggggcaa cgtcagcgct atcgaccgcg aacgcgggct ggtggtgatc 120
330 aagcccagcg gcgttgccct cgaaccatg aaagcggccg atatggtggg ggttgatag 180
332 agcggcaagg tgggtggaagg ggagtatcgc ccatcttcgc aactgcgac gcactctgaa 240
334 ctctaccgct gttaccgctc gcttggtggc attgtccata cccactccac tcatgccacc 300
336 gcatgggctc aggcggggct ggcatcccg gcgttaggca ccacgcacgc cgactacttc 360
338 tttggcgaca ttccgtgtac gcgcgggta agcgaagaag aggtgcaggg cgagtatgaa 420
340 ctgaacaccg gcaaagtgat tatcgaaacg ctgggcaacg ccgagccgct gcatacgccg 480
342 ggaattgtgg tgtatcagca cgggcccgtc gcctggggga aagatgctca cgatgcggtg 540
344 cataacgcgg tgggtgatgga agaagtggcg aaaatggcgt ggattgcccg cggcattaac 600
346 ccacaactca atcacatcga cagcttcctg atgaataaac acttcatgcg taaacacggg 660
348 cctaacgctt attacgggca gaagtag 687

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351 <210> SEQ ID NO: 21

352 <211> LENGTH: 65

353 <212> TYPE: DNA

354 <213> ORGANISM: Artificial

W--> 356 <220> FEATURE:

W--> 356 <223> OTHER INFORMATION:

W--> 356 <400> 21

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357 cagcaggtat ttgaagccaa catggagctg ccgcgctacg ggctggtgta ggctggagct 60
359 gcttc 65

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362 <210> SEQ ID NO: 22

363 <211> LENGTH: 66

364 <212> TYPE: DNA

365 <213> ORGANISM: Artificial

W--> 367 <220> FEATURE:

W--> 367 <223> OTHER INFORMATION:

W--> 367 <400> 22

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368 aaacggctgc ggaattagac cagttatctc ccgaggaagg aaattaattc cggggatccg 60
370 tcgacc 66

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373 <210> SEQ ID NO: 23

374 <211> LENGTH: 21

375 <212> TYPE: DNA

376 <213> ORGANISM: Artificial

W--> 378 <220> FEATURE:

*err occurs in subsequent sequence (see p.6)*

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/531,870

DATE: 09/12/2005  
TIME: 13:21:41

Input Set : A:\764765\_1.txt  
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Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:18,21,22,23,24,26,27,28,29

Use of <220> Feature (NEW RULES):

*error explanation*  
Sequence(s) are missing the <220> Feature and associated headings.  
Use of <220> to <223> is MANDATORY if <213> ORGANISM is "Artificial Sequence"  
or "Unknown". Please explain source of genetic material in <220> to <223>  
section (See "Federal Register," 6/01/98, Vol. 63, No. 104, pp.29631-32).  
(Sec.1.823 of new Rules)

Seq#:18,21,22,23,24,26,27,28,29

## VERIFICATION SUMMARY

PATENT APPLICATION: US/10/531,870

DATE: 09/12/2005

TIME: 13:21:41

Input Set : A:\764765\_1.txt

Output Set: N:\CRF4\09122005\J531870.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No  
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:251 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:18, <213>  
ORGANISM:Artificial  
L:251 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:18, <213>  
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L:251 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:18,Line#:251  
L:356 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:21, <213>  
ORGANISM:Artificial  
L:356 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:21, <213>  
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L:356 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:21,Line#:356  
L:367 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:22, <213>  
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L:367 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:22, <213>  
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L:367 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:22,Line#:367  
L:378 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:23, <213>  
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L:378 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:23,Line#:378  
L:387 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:24, <213>  
ORGANISM:Artificial  
L:387 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:24, <213>  
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L:387 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:24,Line#:387  
L:427 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:26, <213>  
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ORGANISM:Artificial  
L:427 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:26,Line#:427  
L:438 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:27, <213>  
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L:438 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:27, <213>  
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L:438 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:27,Line#:438  
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L:449 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:28, <213>  
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L:449 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:28,Line#:449  
L:458 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:29, <213>  
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L:458 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:29, <213>  
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